

## PredicationResultsViewer Documentation

**Description:** Visualizes prediction results

**Author:** GenePattern Team, gp-help@broad.mit.edu

## Summary:

The PredictionResultsViewer is used to view results from testing a predictor where the results can come from either a separate test set (e.g. the KNN or WeightedVoting algorithm) or a cross-validation prediction (e.g., the KNNXValidation or WeightedVotingXValidation algorithms). The prediction results and the model used to obtain them are summarized in the top portion of the panel. Details of the prediction results for each of the samples are shown in the table at the bottom of this panel.

The first column in the table gives the sample name (datapoint). The second column gives the true class from the class template file and the third column gives the predicted class. The fourth column gives the Confidence associated with the predicted class (see algorithm documentation for a description of its calculation. The fifth column indicates when the prediction is an error or no call is made; it is blank when the prediction is correct.

The confidence threshold for making a call and potential errors can be adjusted by entering a number into the *No Call Threshold* box and pressing the *Update Calls* button. The results from the displayed prediction can be saved by clicking the *Save* button that brings up a save dialog box. The confusion matrix, which displays a table that summarizes the predicted classes against the true classes, for the prediction can be displayed by clicking the *Confusion Matrix* button. The table can also be saved using keyboard copy commands.

The viewer includes an interactive plot of the confidence in the prediction results. Clicking on a point in the plot selects the corresponding element in the table and selecting an element in the table highlights the corresponding data point in the plot. Users can zoom in and out of the plot by clicking and dragging the mouse or by selecting *View>Zoom In or View>Zoom Out*. The scale of the plot can be reset to its original value by choosing the Reset menu item in the View menu. Elements in the table can be selected individually with the mouse. To select all table elements choose *Edit>Select All*. Selected table elements can be copied by picking *Edit>Copy*. Selecting *File>Save Image* will save an image of the plot and selecting *File>Print* will print the plot.

## Parameters:

Name	Description
prediction.results.file	Prediction resultsodf

## Platform dependencies:

Module type: Visualizer

CPU type: any OS: any Java JVM level: 1.5